



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/750,264

12/31/2003

Todd Heintz

034300-000491

1753

7590  
Robert E. Krebs  
Thelen Reid & Priest, LLP  
P.O. Box 640640  
San Jose, CA 95164-0640

05/02/2007

EXAMINER

PEREZ, ANGELICA

ART UNIT

PAPER NUMBER

2618

MAIL DATE

DELIVERY MODE

05/02/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/750,264

Applicant(s)

HEINTZ ET AL.

Examiner

Perez M. Angelica

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>1-28-05, 3-30-06, 4-2-07</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 10-14, 16, 23-27, 41-43 and 50-54 are rejected under 35

U.S.C. 102(b) as being anticipated by Moon Byoung-Seoup (Moon, US Patent No.: 7,130,669 B2).

Regarding claims 1, 16 and 41, Moon teaches of a hand-held electronic device (figure 4), comprising: a display screen for displaying text and graphical information (figure 5, item 222 and column 5, lines 39-41, where when the apparatus is in an open position, as in figure 6, it operates as a PDA and where PDA's provide graphical information); a number dial pad coupled to the display screen such that the display screen folds upward to reveal the display screen and the number dial pad (figure 5, items 200, 240 and 260; column 5, lines 39-41, where when the apparatus is in a close position, as shown in figure 5, it operates as a telephone; thus, "number pad"); and a keyboard underneath the number dial pad (figure 6, items 204, 242 and 262) such that said number pad folds out sideways to reveal the keyboard (figure 6, items 24 and 26 fold out to reveal the keypad; column 5, lines 39-41, where when the apparatus is in an open position, as in figure 6, it operates as a PDA; thus, "keyboard"); at least one

speaker to transmit audio information (figure 5, item 220); and at least one microphone for receiving audio data (column 5, lines 3-5).

Regarding claims 2 and 42, Moon teaches all the limitations of claims 1 and 41, respectively. Moon further teaches of at least one speaker to transmit audio information (figure 5, item 220).

Regarding claims 3, and 43, Moon teaches all the limitations of claims 1 and 41, respectively. Moon further teaches of at least one microphone for receiving audio data (column 5, lines 3-5).

Regarding claims 10, 23 and 50, Moon teaches all the limitations of claims 1, 16 and 41, respectively. Moon further teaches where the number pads folds sideways to a right side (figure 6, item 24, where the number pad folds sideways toward the right as shown).

Regarding claims 11, 24 and 51, Moon teaches all the limitations of claims 1, 16 and 41, respectively. Moon further teaches where the number pads folds sideways to a left side (figure 6, item 26, where the number pad folds sideways toward the left as shown).

Regarding claims 12, 25 and 52, Moon teaches all the limitations of claims 1, 16 and 41, respectively. Moon further teaches where the number pad is coupled to the display screen with a hinge (figure 3, item 14 and column 4, lines 19-23).

Regarding claims 13, 26 and 53, Moon teaches all the limitations of claims 1, 16 and 41, respectively. Moon further teaches of at least one function key that controls the basic functions of the device (column 24-29).

Regarding claims 14, 27 and 54, Moon teaches all the limitations of claims 1, 16 and 41, respectively. Moon further teaches where the number pad is coupled to the keyboard with a hinge (see figure 6, where the axis A2 of the hinge 14, seen previously in figures 2 and 3, shows the coupling between the keyboard and display).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4, 15, 17, 28, 44 and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Miramontes, Ivan (Miramontes, US 2002/0,072,395 A1).

Regarding claims 4, 17 and 44, Moon teaches all the limitations of claim 1, 16 and 41, respectively.

Moon does not specifically teach where keyboard is a qwerty keyboard, although it could be assumed.

In related art concerning a telephone with fold out keyboard, Miramontes specifically teaches where the keyboard is a qwerty keyboard (paragraph 15, last 7 lines).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's portable information device with Miramontes's

qwerty keyboard in order to obtain a standard computer/typewriter English language style keyboard.

Regarding claims 15, 28 and 55, Moon teaches all the limitations of claims 1, 16 and 41, respectively.

Moon does not teach of a camera.

Miramontes teaches of a camera (paragraph 41, figure 1, item 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's portable information device with Miramontes's camera in order to provide a video phone, as taught by Miramontes.

5. Claims 29-31 and 36-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Zatloukal et al. (Zatloukal, US Pub. No.: 2003/0,073,462 A1).

6. Regarding claim 29, Moon teaches of a hand-held electronic device (figure 4), comprising: a display screen for displaying text and graphical information (figure 5, item 222 and column 5, lines 39-41, where when the apparatus is in an open position, as in figure 6, it operates as a PDA and where PDA's provide graphical information); a number dial pad coupled to the display screen (figure 5, items 200, 240 and 260; column 5, lines 39-41, where when the apparatus is in a close position, as shown in figure 5, it operates as a telephone; thus, "number dial pad").

Moon does not specifically teach of a game pad keyboard underneath the number dial pad such that the number pad folds out sideways to reveal the game pad keyboard.

In related art concerning adding control keys to mobile device via smart interchangeable cover, Zatloukal teaches of a game pad keyboard underneath the number dial pad such that the number pad folds out sideways to reveal the game pad keyboard (paragraphs 18, 51-54 and figures 9 a-c, abstract; where the game pad keyboard can take the place of the PDA keyboard).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's portable information device with Zatloukal's game pad keyboard in order to have a smart device that can operate according to different functions given, as taught by Zatloukal.

Regarding claim 30, Moon and Zatloukal teach all the limitations of claim 29. Moon further teaches of at least one speaker to transmit audio information (figure 5, item 220).

Regarding claim 31, Moon and Zatloukal teach all the limitations of claim 29.. Moon further teaches of at least one microphone for receiving audio data (column 5, lines 3-5).

Regarding claim 36, Moon and Zatloukal teach all the limitations of claim 29. Moon further teaches where the number pads folds sideways to a right side (figure 6, item 24, where the number pad folds sideways toward the right as shown).

Regarding claim 37, Moon and Zatloukal teach all the limitations of claim 29. Moon further teaches where the number pad folds sideways to a left side (figure 6, item 26, where the number pad folds sideways toward the left as shown).

Regarding claim 38, Moon and Zatloukal teach all the limitations of claim 29. Moon further teaches of at least one function key that controls the basic functions of the device (column 24-29).

Regarding claims 39, Moon and Zatloukal teach all the limitations of claim 29. Moon further teaches where the number pad is coupled to the keyboard with a hinge (see fire 6, where the axis A2 of the hinge 14, seen previously in figures 2 and 3, shows the coupling between the keyboard and display).

7. Claim 5-6, 18-19 and 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Chung et al. (Chung, US Patent No.: 6,825,832 B2).

Regarding claims 5, 18 and 45, Moon teaches all the limitations of claims 1, 16 and 41, respectively.

Moon does not specifically teach where the keyboard is a game pad keyboard (column 9, lines 12-26).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's portable information device with Chung's game pad keyboard in order to allow the device to operate in three different modes including, game mode, as taught by Chung.

Regarding claims 6, 19 and 46, Moon teaches all the limitations of claims 5, 18 and 45, respectively.

Chung further teaches game pad keyboard comprises a directional pad (figure 8 and column 9, lines 7-9, e.g., "cursor control 52a").



Art Unit: 2618

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's portable information device with Chung's cursor control in order to provide directional pad control.

8. Claims 7-9, 20-22, 33-35 and 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Chung, and further in view of Zatloukal.

Regarding claims 7, 20, 33 and 47, Moon and Chung teach all the limitations of claims 5, 18, 29 and 45, respectively.

Moon and Chung do not specifically teach where the game pad keyboard comprises at least one programmable action button.

Zatloukal teaches where the game pad keyboard comprises at least one programmable action button (claim 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Chung' combined portable information device with Zatloukal's "programmable function key" in order to change the functions of the keys.

Regarding claims 8, 21, 34 and 48, Moon and Chung teach all the limitations of claim 5, 18, 29 and 45, respectively.

Moon and Chung do not specifically teach where the game pad keyboard comprises at least one programmable action button.

Zatloukal teaches where the game pad keyboard comprises at least one trigger (paragraph 28, where a joystick as any regular key can provide a trigger).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Chung's combined portable information device with Zatloukal's trigger in order to provide the functions of a game.

Regarding claims 9, 22, 35 and 49, Moon and Chung teach all the limitations of claim 5, 18 and 45, respectively.

Moon and Chung do not specifically teach where the game pad keyboard comprises a slider throttle control.

Zatloukal teaches where the game pad keyboard comprises a slider throttle control (paragraph 28, where the "joystick" provides "slider throttle control").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's and Chung's combined portable information device with Zatloukal's joystick in order to control the game, as taught by Zatloukal.

9. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Zatloukal and further in view of Chung.

Regarding claim 32, Moon and Zatloukal teach all the limitations of claim 29.

Chung further teaches game pad keyboard comprises a directional pad (figure 8 and column 9, lines 7-9, e.g., "cursor control 52a").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's portable information device with Chung's cursor control in order to provide directional pad control.

10. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Moon in view of Zatloukal and further in view of Miramontes.

Art Unit: 2618

Regarding claim 40, Moon and Zatloukal teach all the limitations of claim 29.

Moon does not teach of a camera.

Miramontes teaches of a camera (paragraph 41, figure 1, item 45).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Moon's portable information device with Miramontes's camera in order to provide a video phone, as taught by Miramontes.

***Conclusion***

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angelica Perez whose telephone number is 571-272-7885. The examiner can normally be reached on 6:00 a.m. - 1:30 p.m., Monday - Friday.

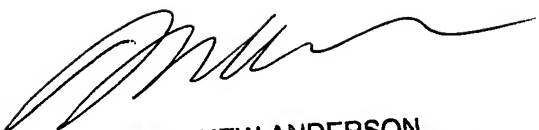
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on (571) 272-4177. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either the PAIR or Public PAIR. Status information for unpublished applications is available through the Private PAIR only. For more information about the pair system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). Information regarding Patent Application Information Retrieval (PAIR) system can be found at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the TC 2600's customer service number is 703-306-0377.



Angelica Pérez  
Examiner



MATTHEW ANDERSON  
SUPERVISORY PATENT EXAMINER

Art Unit 2618

April 23, 2007